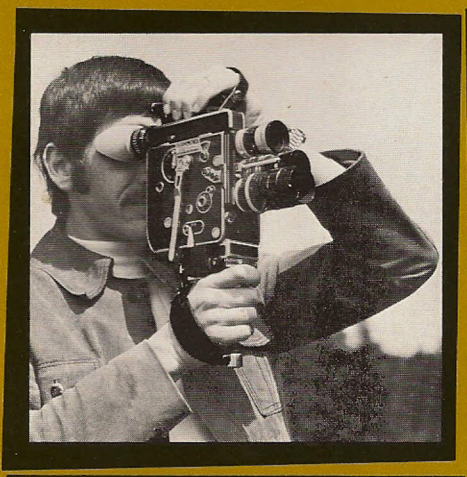
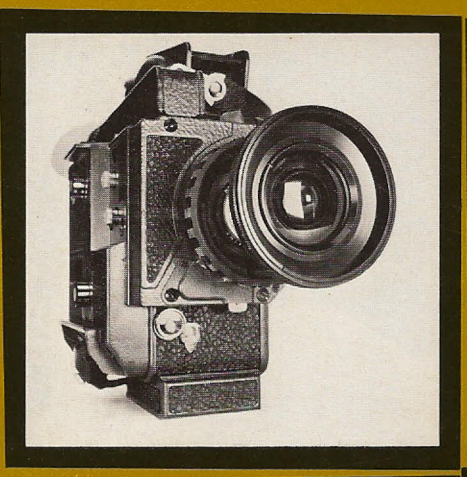
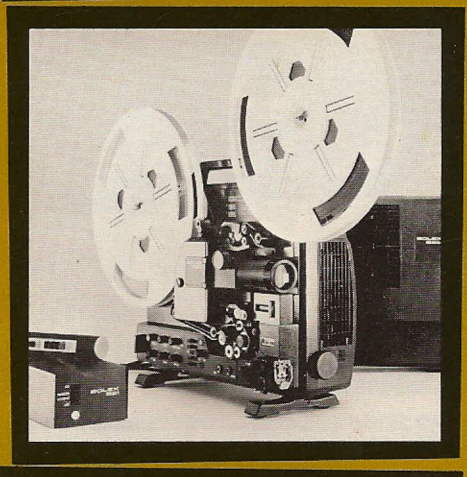
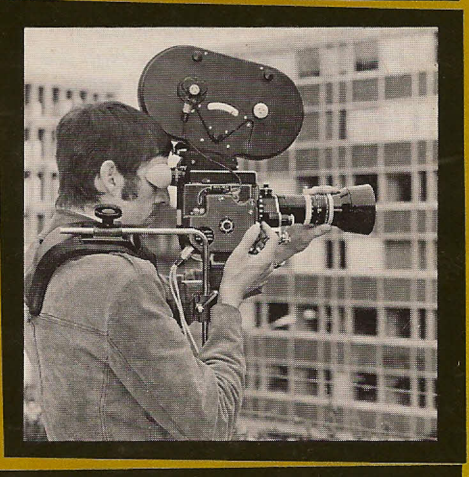
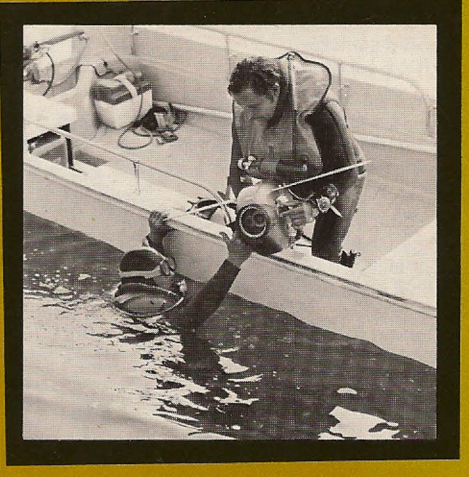
16mm BOLEX







English

Quality and after-sales service

Bolex products are manufactured with the utmost care and subjected to rigorous tests. They therefore meet the highest standards of quality and precision for which the name of Bolex is world renowned. The international Bolex organization offers efficient after-sales service throughout the world. You can entrust your equipment to a Bolex distributor with complete confidence. He employs qualified technicians, usually trained in Switzerland.

Bolex International S.A. Yverdon/Switzerland

BOLEX
of Switzerland

Bolex International S.A. reserves the right to modify, without prior notification, the design and features of the models described in this brochure.

C 297.003/86 Anglais Printed in Switzerland

The Bolex H16 range:

four cameras to meet your every need, your every requirement

Bolex H16: a complete, functional and flexible filming system. At the heart of the system, four professional cameras:

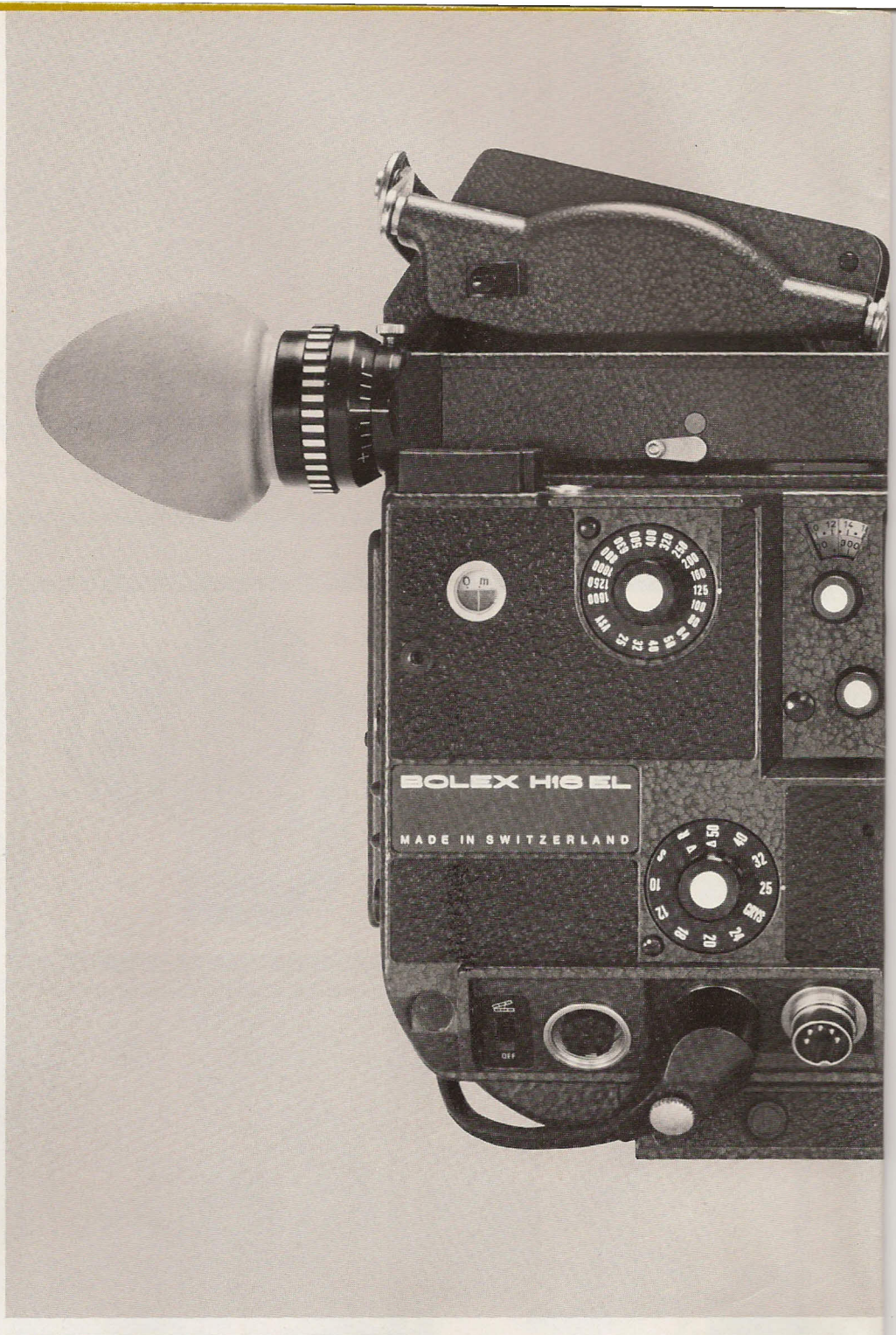
- *the EL and EBM electric models, with film driven by built-in electric motor.*
- *the RX-5 and SBM models, with film driven by spring motor or auxiliary electric motor;*

Each of these four cameras constitutes the basic item of equipment that can be completed by a large number of accessories, extending the scope of your camera in any direction required, in accordance with your needs.

Bolex H16

- *Equipment tailored exactly to your requirements, minimizing the cost, because you buy only the accessories you really need.*
- *Equipment suitable for all fields of human activity: documentaries, TV coverage, advertising films, films devoted to research and education in fields such as science, medicine, sport, art, industry, etc., etc.*

A Bolex H16 camera is a guarantee in itself. The guarantee offered by high precision, exceptionally sturdy equipment with a top quality optical system: foolproof operation and producing steady, clear, correctly exposed pictures.



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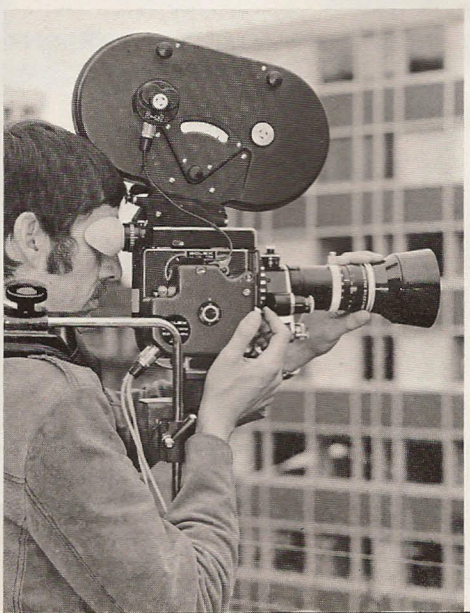
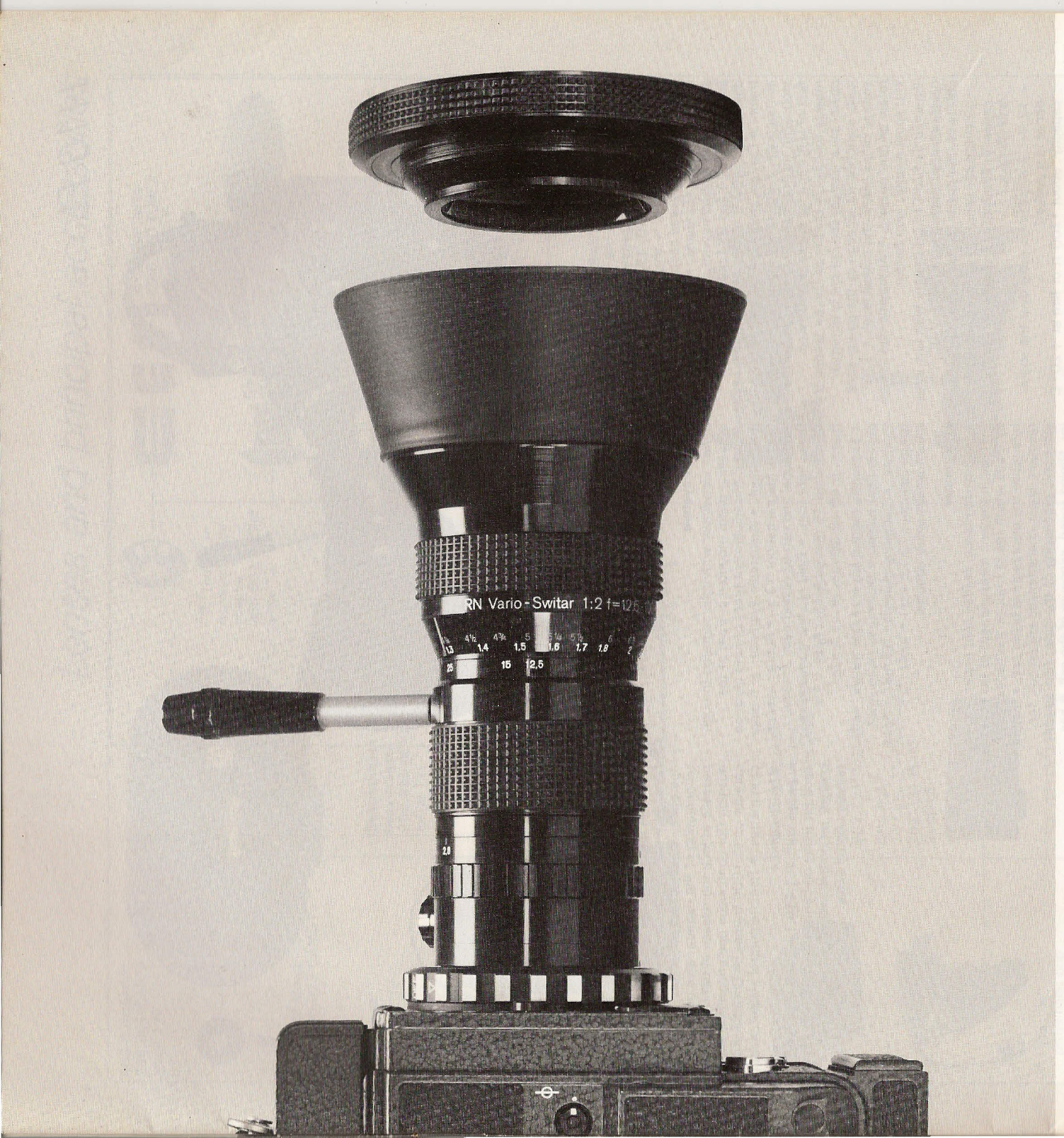
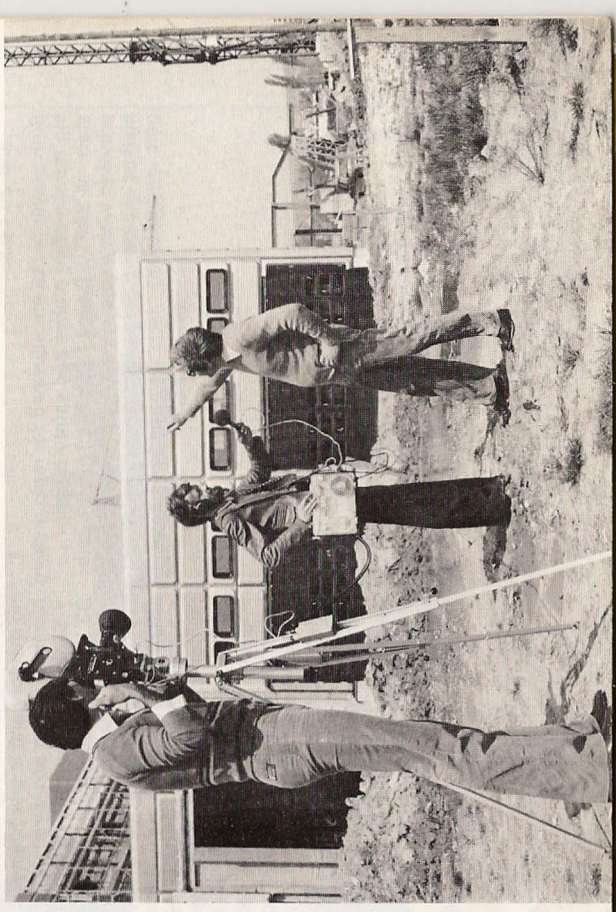
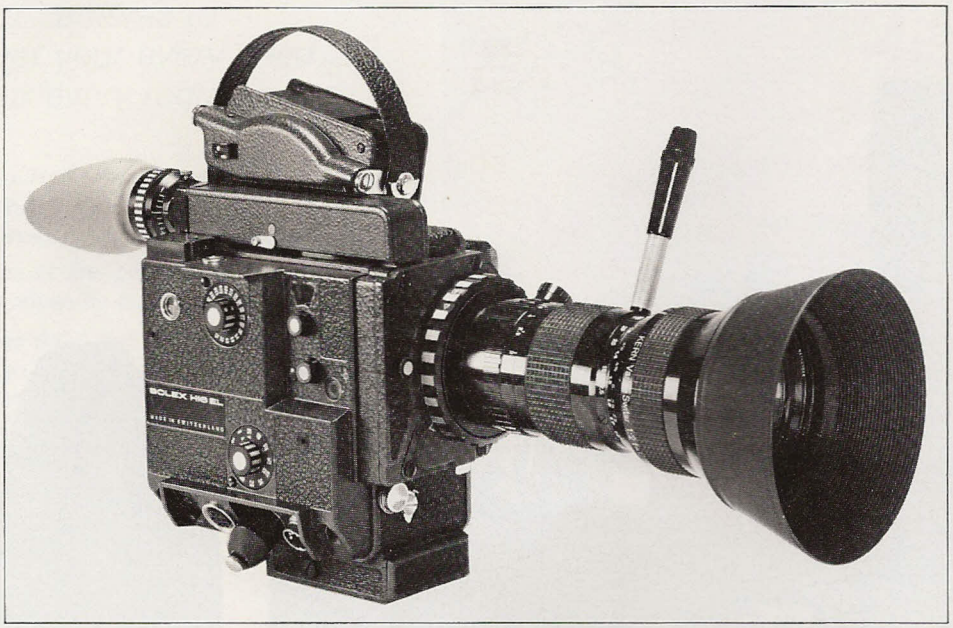



RN Vario-Switar 1:2 f=12.5



H16 EL



Mechanical system

Electric motor, electronically regulated by impulses, for optimum use of the power of the battery and perfectly constant filming speeds. • Filming speeds of 10, 12, 18, 20, 24, 25, 32, 40 and 50 f.p.s. + single-frame. • 24 and 25 f.p.s. filming speed accuracy in accordance with sync pulse standards. • Possibility of sound synchronization with crystal control accessory at 24 and 25 f.p.s.; maximum deviation for 400 ft of film: less than one frame. • Camera stops with shutter closed for all functions. • Practically instant start and stop, with no noticeable overexposure of the first or last frame of a take. • Unlimited reverse running. • Built-in device for testing the power pack charge; the current is automatically switched off as soon as the power pack voltage drops below the critical level. • 170° rotary shutter opening. • Automatic film threading; spool ejector; loop former.

Powered by SAFT Ni-Cd battery with low internal resistance, nominal voltage 12 V-DC; choice of two power packs:

— 12 V/0.8 Ah, mounted on the camera lid; capacity: about 600 ft of film at +20° C and 25 f.p.s.;

— 12 V/1.2 Ah, carried slung over the shoulder or in a pocket; capacity: about 1200 ft of film at +20° C and 25 f.p.s.

Both power packs are equipped for rapid recharging (temperature probes and safety thermostat): all SAFT VR-type NiCd elements are also provided with a safety valve as protection against excessive pressure. Two battery chargers are available:

— standard charger: recharges either power pack in about 12 hours;

— rapid charger: recharges the 12 V/0.8 Ah power pack in about 50 minutes and the 12 V/1.2 Ah power pack in about 1 hour 20 minutes.

Optical system

Reflex viewfinder with light captured through swivelling prism mounted in front of the shutter. Misadjustment-proof ground glass on prism itself. • Adjustable eyepiece: ± 5 diopters. • Magnification: 13 x. • Rubber eyecup, directional and can be folded over. • Viewfinder light trap. • Field of view corresponding to standard 16 mm projection field. • TV frame: 8.40 × 6.30 mm; R = 1.7 mm.

• Extremely rugged *bayonet lens mount,* with built-in filter holder. • Bearing on three small tongues. • Centering diameter: 60 mm. • Focal flange distance: 23.22 mm. • Most "C" mount lenses easily adapted.

Light meter

• High performance, *built-in light meter*
• Through-the-lens measurement of the light by a cell which fits in front of the filming aperture while the diaphragm is being set. • Instant reaction, linear characteristic silicon cell, for electronic processing of the data: film sensitivity, filming speed, exposure of the cell. It has no memory and is practically insensitive to blinding, ageing and variations in temperature. • Sensitivity range; 25 to 1600 ASA (15 to 33 DIN) with automatic coupling at all filming speeds. • The silicon cell is "adapted" to the spectral sensitivity of the film by an optical filter.
• Measurement of the light in the centre of the field of view over about 35% of the picture area. • Manual operation of the diaphragm setting ring, the correct opening being set by balancing the brilliance of two light-emitting diodes located in the viewfinder; possibility of detecting an over- or under-exposure of 1 stop.

Synchronous sound recording

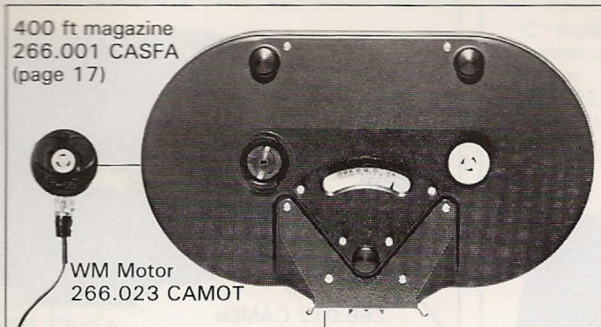
Sync pulse socket for sync pulse and automatic slating, or for connecting a crystal accessory. • Slating lamp switch.

General

Nominal capacity: all 16 mm films on 100 ft spools. • Possibility of mounting an accessory 400 ft magazine. • Synchro-flash socket. • Built-in release switch controlling at functions: forward and reverse motion, singleframe operation. • Safety lock: prevents the accidental operation of the camera; also makes it possible to lock the release in the "release" position (for continuous operation). • Frame counter up to 1000 frames. • Counter in feet or in metres. • Remote-control socket.

H16 EL camera
supplied with 261.440 12 V/0.8 Ah power pack for fixing on camera lid, 261.880 battery charger for normal charging and 265.005 remote control cable. Code: 210.065 ELUIP

Lenses and principal accessories

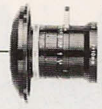


400 ft magazine
266.001 CASFA
(page 17)

WM Motor
266.023 CAMOT

"C" mount → bayonet mount adapter
265.662 ADSIM
(page 12)

Extension tubes
266.440 TUBEX
(page 13)



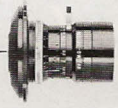
Kern Switar
10 mm f/1.6 MC
220.104 COABA
(page 12)

Aspheron
f = 5.5 mm MC
220.113 CESAF
(page 13)

Set of 4 gelatine filters
265.339 FIGEL

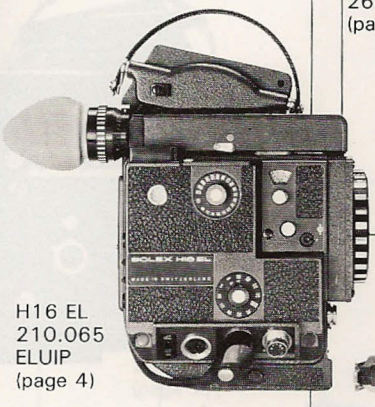
Synchro-flash relay-housing
266.990 BOISY
(page 17)

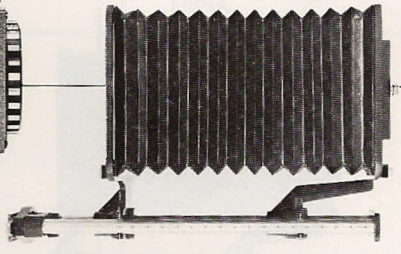
Set of 4 filter holders
265.341 ELPFI



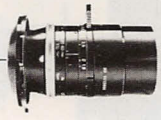
Kern Macro-Switar
26 mm f/1.1 MC
220.264 COTBE
(page 12)

Matte box
266.220 COZOM
(page 17)



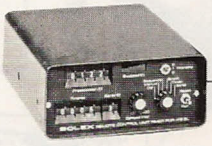


H16 EL
210.065
ELUIP
(page 4)



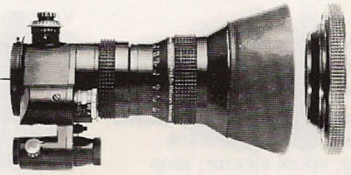
Kern Macro-Switar
75 mm f/1.9 MC
220.755 TRELO
(page 12)

Remote control with timer
266.880 ELTIM
(page 18)



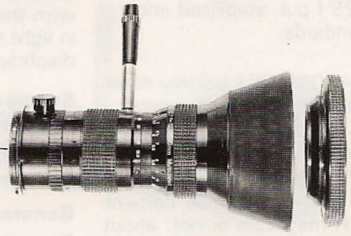
Crystal/sync pulse accessory for both 24 f.p.s. 60 cycles and 25 f.p.s. 50 cycles
262.221 PICAR

ditto but 24 f.p.s. 50 cycles only
262.331 PIJAP
(page 15)



Kern Vario-Switar
100 PTL
12.5-100 mm f/2
with Aspheron
6.5 mm MC,
automatic diaphragm and variable speed power zoom
221.130 VASPO
(page 12)

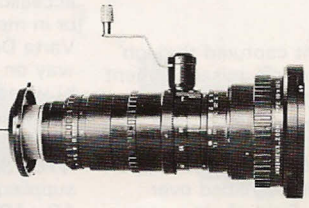
"Electric" pistol hand grip
263.110 ELPOI
(page 15)



Kern Vario-Switar
12.5-100 mm f/2
with Aspheron
6.5 mm MC
221.125 NOUFA
(page 12)

Accumulator
12 V/0.8 Ah
power pack
261.445 ELHUI
(page 14)

Accumulator
12 V/1.2 Ah
power pack
261.660 ELPOW
(page 14)



Angénieux
10×12 C
12-120 mm f/2
222.121 ANOBA
(page 12)

Battery charger
261.880 ECHAR
(page 14)

Fast charger
261.990 ELRAP
(page 14)

For other Angenieux lenses such as models 6×9.5, 15×10 and 20×12 and extremely long tele-lenses, special lenses, night lenses with electronic image amplifier, video viewers, etc., please contact your local Bolex Distributor or BOLEX INTERNATIONAL S.A., Yverdon, Switzerland.

H16 EBM Electric

Mechanical system

Electric motor, electronically regulated.
• Shutter open to 170°; not automatically closed when camera stops.

Operation: normal forward motion, continuous operation, full rewinding with hand crank.
• Automatic threading; spool ejector; loop former.

Filming speeds 10, 18, 24, 25 and 50 f.p.s.
• Speeds of 24 and 25 f.p.s. stabilized according to sync pulse standards.

Power supply
a) By Varta Deac 10 × 1000 DKZ battery housed in the compartment provided in the power grip. • Capacity 1 Ah. • Nominal voltage: 12 V.
b) By 1.2 Ah power pack hanging from the shoulder. • Nominal voltage: 12 V.

Current supplied at all speeds, whether camera equipped with a 400 ft magazine or not: about 1 A. • Capacity: approx. 1200 ft of film at +20° C.

Optical system

Reflex viewfinder with light captured through exceptionally sturdy, swivelling, misadjustment proof prism, mounted in front of the shutter.
• No flicker; picture always visible. • Fine ground glass on prism itself. • Magnification 13 x.
• Adjustable eyepiece: ± 5 diopters. • Rubber eyecup, directional and can be folded over
• Viewfinder light trap. • Field of view corresponding to standard 16 mm projection field.
• TV frame: 8.40 × 6.30 mm; R = 1.7 mm.

Very sturdy *bayonet lens mount.* • Bearing on three small tongues; centering diameter: 60 mm. • Focal flange distance: 23.22 mm (17.52 mm with adapter for "C" mount).
• Most "C" mount lenses easily adapted.
• Built-in, retractable, filter slot for gelatine filters.

Light meter

The H16 EBM Electric camera can be equipped with the Vario-Switar 100 PTL lens with built-in light meter, which automatically sets the diaphragm during filming.

Synchronous sound recording

Possibility of synchronization by crystal control or sync pulse equipment with automatic clapper, at 24 or 25 f.p.s.

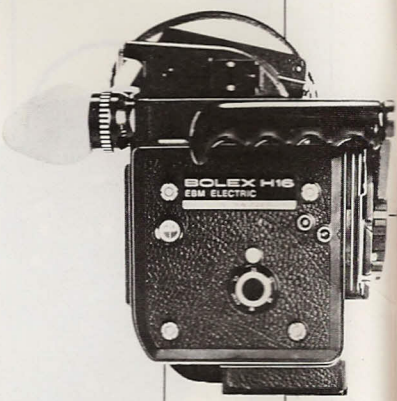
General

Capacity: single or double perforated 16 mm films on 100 ft spools; possibility of fitting accessory 400 ft magazine. • Counter in feet or in metres. • Release: a) when powered by Varta Deac 10 × 1000 DKZ battery, by two-way on-off switch on power grip; safety lock; b) when powered by 1.2 Ah power pack, by power and remote control cable plugged into an accessory base.

H16 EBM Electric camera
supplied with power grip, Varta-Deac 10 × 1000 DKZ battery and battery charger

	Codes:
• without TV frame	210.040 EBIME
• with TV frame	210.041 EBITV

MM Motor
266.012 CAMEB
(page 17)



Base
263.220 EBSOC
(page 17)

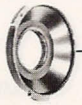
Power and remote control cable
265.010 or 265.015
CASOC CATEL
(page 14)

Accumulator
12 V/1.2 Ah
power pack
261.770
EBPOP
(page 14)

Fast charger
261.990 ELRAP
(page 14)

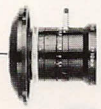
Lenses and principal accessories

"C" mount→ bayonet mount adapter
265.662 ADSIM
(page 12)



Extension tubes
266.440 TUBEX
(page 13)

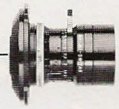
Set of 4 gelatine filters
265.339 FIGEL



Kern Switar
10 mm f/1.6 MC
220.104 COABA
(page 12)

Aspheron
f = 5.5 mm MC
220.113 CESAF
(page 13)

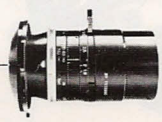
400 ft magazine
266.001 CASFA
(page 17)



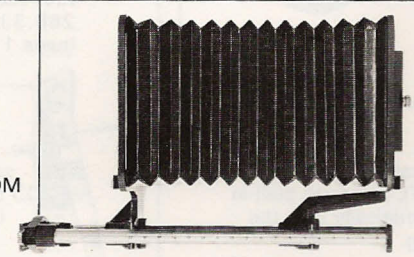
Kern Macro-Switar
26 mm f/1.1 MC
220.264 COTBE
(page 12)

H16 EBM Electric
210.040 EBIME
or
210.041 EBITV
(page 6)

Set of 4 filter holders
265.332 FIBRA

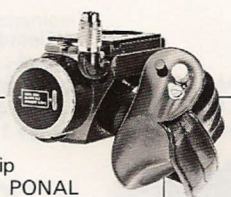


Kern Macro-Switar
75 mm f/1.9 MC
220.755 TRELO
(page 12)



Matte box
266.220 COZOM
(page 17)

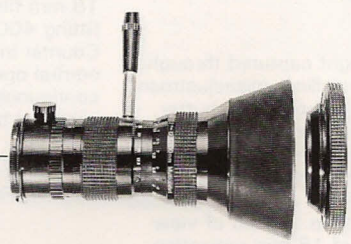
Kern Vario-Switar
100 PTL
12.5-100 mm f/2
with Aspheron
6.5 mm MC,
automatic
diaphragm and
variable speed
power zoom
221.130 VASPO
(page 12)



Power grip
261.001 PONAL
(page 14)

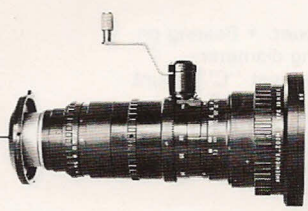
Crystal/sync pulse accessory for both 24 f.p.s. 60 cycles and 25 f.p.s. 50 cycles
262.221 PICAR

ditto but 24 f.p.s. 50 cycles only
262.331 PIJAP
(page 15)

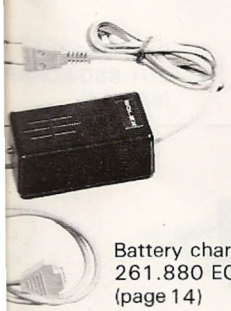


Kern Vario-Switar
12.5-100 mm f/2
with Aspheron
6.5 mm MC
221.125 NOUFA
(page 12)

Battery container
261.220 COTAC
(page 14)

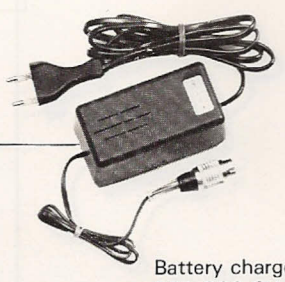


Angénieux
10×12 C
12-120 mm f/2
222.121 ANOBA
(page 12)



Battery charger
261.880 ECHAR
(page 14)

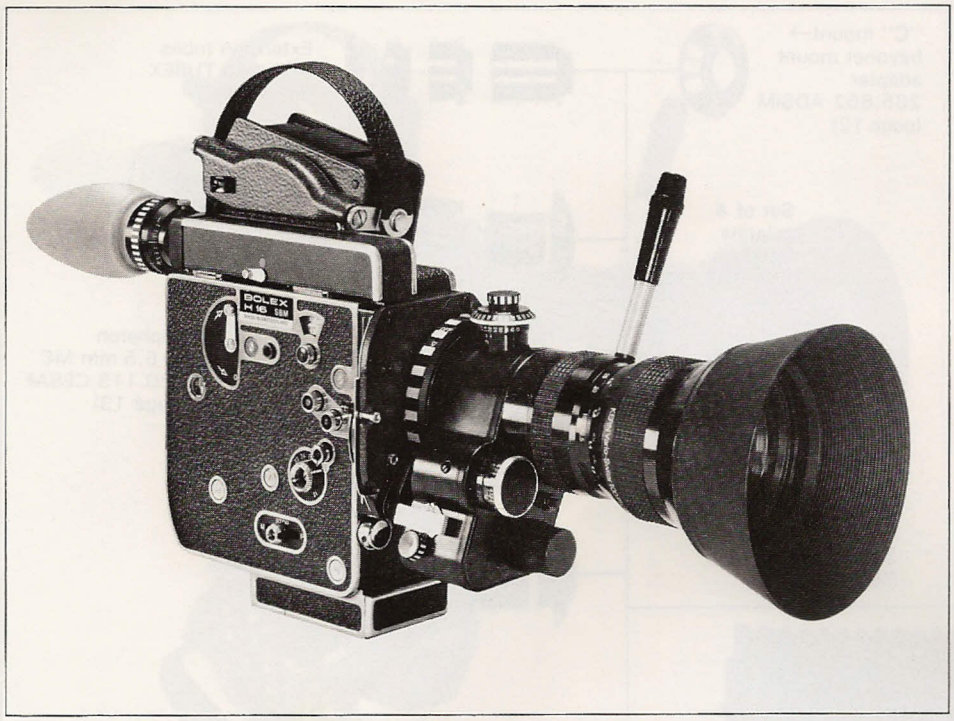
Varta-Deac
10×1000 DKZ
battery
261.110 BATEB
(page 14)



Battery charger
261.330 CHAAV
(page 14)

For other Angenieux lenses such as models 6×9.5, 15×10 and 20×12 and extremely long tele-lenses, special lenses, night lenses with electronic image amplifier, video viewers, etc., please contact your local Bolex Distributor or BOLEX INTERNATIONAL S.A., Yverdon, Switzerland.

H16 SBM



Mechanical system

Powerful spring motor with high precision governor (drives 5 m of film with a single windig). • The camera can be fitted with an auxiliary electric motor. • Shutter with variable opening angle (with the camera stopped as well as while filming); maximum opening 135°; shutter closes when camera stops.

Operation: normal forward motion, continuous and single-frame filming, full rewinding with hand crank. • Automatic threading; spool ejector; loop former.

Filming speeds 12, 16, 18, 24, 32, 48 and 64 f.p.s. + single frame.

Optical system

Reflex viewfinder with light captured through exceptionally sturdy, swivelling, misadjustment proof prism, mounted in front of the shutter. • No flicker; picture always visible. • Fine ground glass on prism itself. • Magnification 13 x. • Adjustable eyepiece: ± 5 diopters. • Rubber eyecup, directional and can be folded over. • Viewfinder light trap. • Field of view corresponding to standard 16 mm projection field. • TV frame: 8.40 × 6.30 mm; R = 1.7 mm.

Very sturdy *bayonet lens mount.* • Bearing on three small tongues; centering diameter: 60 mm. • Easily adapted for most "C" mount lenses. • Focal flange distance: 23.22 mm (17.52 mm with adapter for "C" mount. • Built-in, retractable, filter slot for gelatine filters.

Light meter

The H16 SBM camera can be equipped with the Vario-Switar 100 PTL lens with built-in light meter, which automatically sets the diaphragm during filming.

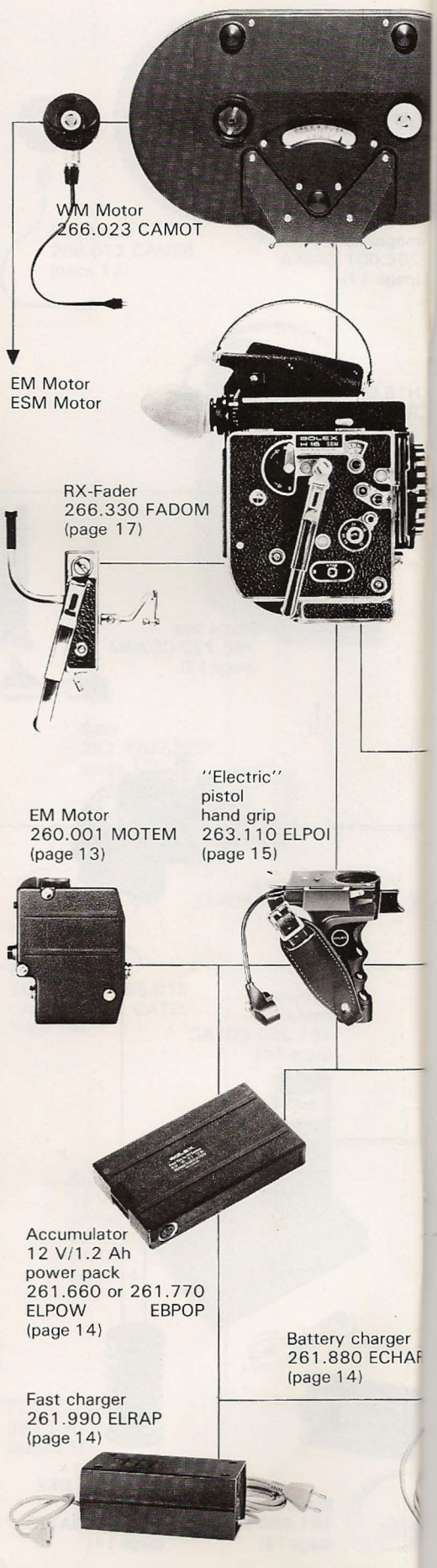
Synchronous sound recording

Camera equipped with ESM auxiliary electric motor: possibility of synchronisation by crystal control or sync pulse equipment with automatic clapper, at 24 or 25 f.p.s.

General

Capacity: all single or double perforated 16 mm films on 100 ft spools; possibility of fitting 400 ft magazine. • Frame counter. • Counter in feet or in metres. • Front release for normal operation; side release for normal, continuous and single-frame operation (can be operated by cable).

	Codes:
H16 SBM camera	210.030 BACIN
with RX-Fader	210.031 BACOR

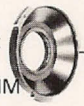


Lenses and principal accessories

400 ft
magazine
266.001 CASFA
(page 17)

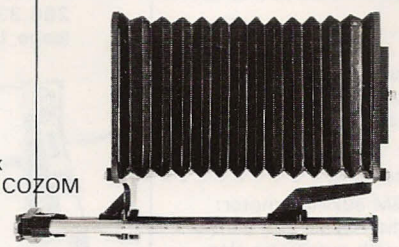
H16 SBM
210.030 BACIN
with RX-Fader
210.031 BACOR
(page 8)

"C" mount → bayonet mount adapter
265.662 ADSIM
(page 12)



Set of 4
gelatine
filters
265.339 FIGEL

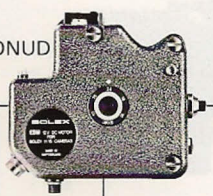
Set of 4
filter holders
265.332
FIBRA



Matte box
266.220 COZOM
(page 17)

"Mechanical"
pistol
hand grip
263.001 HAFRA
(page 15)

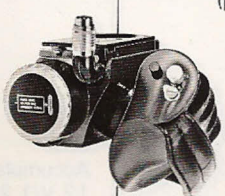
ESM Motor
260.111 MONUD
(page 13)



Crystal/sync pulse
accessory for both
24 f.p.s. 60 cycles
and 25 f.p.s. 50 cycles
262.221 PICAR

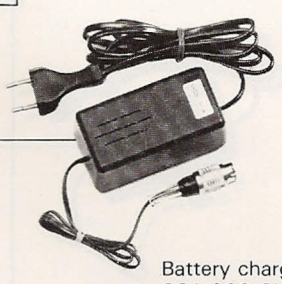
ditto but
24 f.p.s. 50 cycles only
262.331 PIJAP
(page 15)

Battery
container
261.220 COTAC
(page 14)



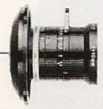
Power grip
261.001 PONAL
(page 14)

Varta-Deac
10×1000 DKZ
battery
261.110 BATEB
(page 14)



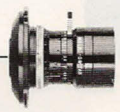
Battery charger
261.330 CHAAV
(page 14)

Extension tubes
266.440 TUBEX
(page 13)

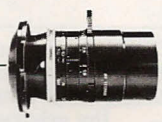


Kern Switar
10 mm f/1.6 MC
220.104 COABA
(page 12)

Aspheron
f = 5.5 mm MC
220.113 CESAF
(page 13)

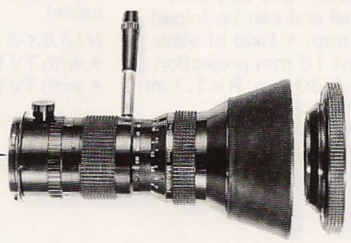


Kern Macro-Switar
26 mm f/1.1 MC
220.264 COTBE
(page 12)



Kern Macro-Switar
75 mm f/1.9 MC
220.755 TRELO
(page 12)

Kern Vario-Switar
100 PTL
12.5-100 mm f/2
with Aspheron
6.5 mm MC,
automatic
diaphragm and
variable speed
power zoom
221.130 VASPO
(page 12)

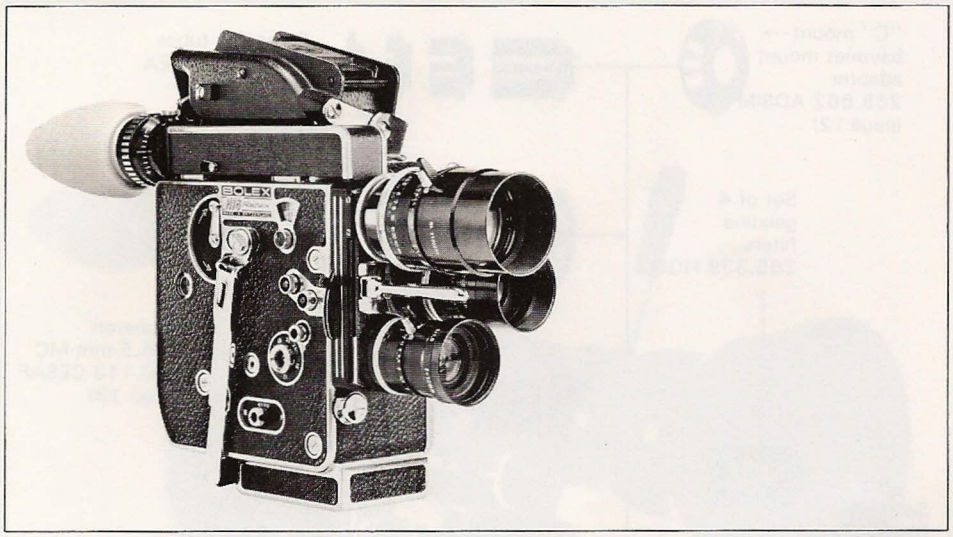


Kern Vario-Switar
12.5-100 mm f/2
with Aspheron
6.5 mm MC
221.125 NOUFA
(page 12)

Angénieux
10×12 C
12-120 mm f/2
222.121 ANOBA
(page 12)

For other Angenieux lenses such as models 6×9.5, 15×10 and 20×12 and extremely long tele-lenses, special lenses, night lenses with electronic image amplifier, video viewers, etc., please contact your local Bolex Distributor or BOLEX INTERNATIONAL S.A., Yverdon, Switzerland.

H16 RX-5



Mechanical system

Powerful spring motor with high precision governor (drives 5 m of film with a single winding). • The camera can be fitted with an auxiliary electric motor. • Shutter with variable opening angle (with the camera stopped as well as while filming); maximum opening 135°; shutter closes when camera stops.

Operation: normal forward motion, continuous and single-frame filming, full rewinding with hand crank. • Automatic threading; spool ejector; loop former.

Filming speeds 12, 16, 18, 24, 32, 48 and 64 f.p.s. + single frame.

Optical system

Reflex viewfinder with light captured through exceptionally sturdy, swivelling, misadjustment proof prism, mounted in front of the shutter. • No flicker; picture always visible. • Fine ground glass on prism itself. • Magnification 13x. • Adjustable eyepiece: ± 5 diopters. Rubber eyecup, directional and can be folded over. • Viewfinder light trap. • Field of view corresponding to standard 16 mm projection field. • TV frame: 8.40 × 6.30 mm; R = 1.7 mm.

Lens turret for three "C" mount lenses. • Thread diameter: 1" (25.4 mm). • Focal flange distance: 17.52 mm. • Built-in filter slot for gelatine filters.

Light meter

The H16 RX-5 camera can be equipped with the Vario-Switar 100 PTL lens with built-in light meter, which automatically sets the diaphragm during filming.

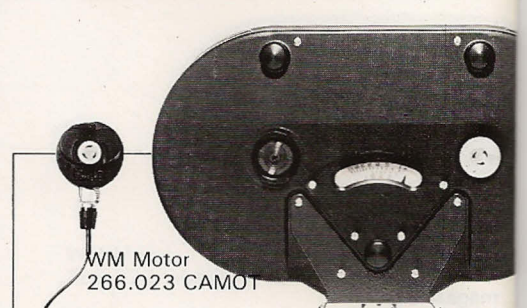
Synchronous sound recording

Camera equipped with ESM auxiliary motor: possibility of synchronization by crystal control or sync pulse equipment with automatic clapper, at 24 or 25 f.p.s.

General

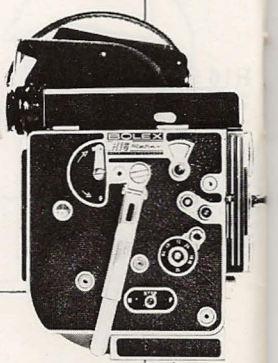
Capacity: all single or double perforated 16 mm films on 100 ft spools; possibility of fitting 400 ft magazine. • Frame counter. • Counter in feet or in metres. • Front release for normal operation; side release for normal, continuous and single-frame operation (can be operated by cable).

H16 RX-5 camera	Codes:
• with TV frame	210.020 REXKI
• with TV frame and RX-Fader	210.021 FAXKI

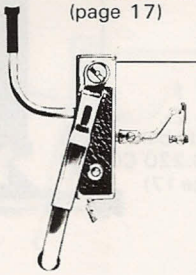


WM Motor
266.023 CAMOT

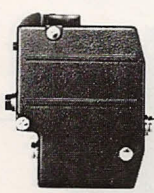
EM Motor
ESM Motor



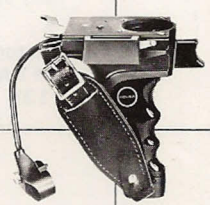
RX-Fader
266.330 FADOM
(page 17)



EM Motor
260.001 MOTEM
(page 13)



"Electric" pistol hand grip
263.110 ELPOI
(page 15)

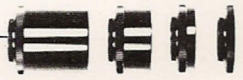


Accumulator
12 V/1.2 Ah
power pack
261.660 or 261.770
ELPOW EBPOP
(page 14)

Battery charger
261.880 ECHAR
(page 14)

Fast charger
261.990 ELRAP
(page 14)

Lenses and principal accessories



Extension tubes
266.440 TUBEX
(page 13)

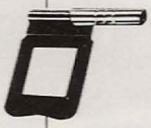
Set of 4
gelatine
filters
265.339
FIGEL

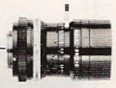
Kern Switar
10 mm f/1.6 MC
220.101 COASE
(page 12)

Aspheron
f = 5.5 mm MC
220.113
CESAF
(page 13)

400 ft
magazine
266.001 CASFA
(page 17)

Set of 4
filter holders
265.330 FIREX

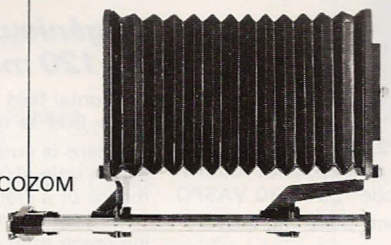




Kern Macro-Switar
26 mm f/1.1 MC
220.261 COTNO
(page 12)

H16 RX-5
210.020 REXKI
with RX-Fader
210.021 FAXKI
(page 10)

Kern Macro-Switar
75 mm f/1.9 MC
220.754 TRETA
(page 12)



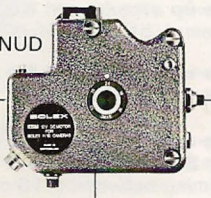
Matte box
266.220 COZOM
(page 17)

"Mechanical"
pistol
hand grip
263.001 HAFRA
(page 15)

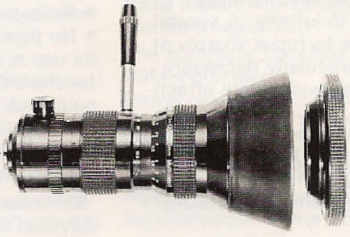
Kern Vario-Switar
100 PTL
12.5-100 mm f/2
with Aspheron
6.5 mm MC,
automatic
diaphragm and
variable speed
power zoom
price and
delivery time
on request
(page 12)

Crystal/sync pulse
accessory for both
24 f.p.s. 60 cycles
and 25 f.p.s. 50 cycles
262.221 PICAR

ESM Motor
260.111 MONUD
(page 13)

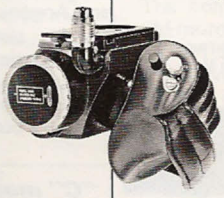


ditto but
24 f.p.s. 50 cycles only
262.331 PIJAP
(page 15)

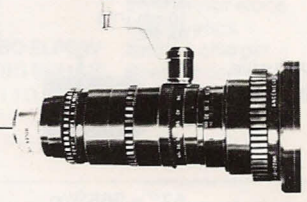


Kern Vario-Switar
12.5-100 mm f/2
with Aspheron
6.5 mm MC
221.123 NOCAF
(page 12)

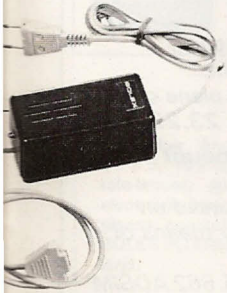
Battery
container
261.220 COTAC
(page 14)



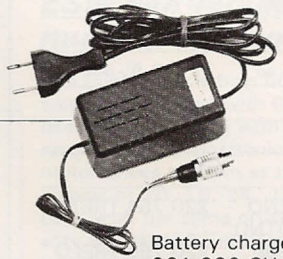
Power grip
261.001 PONAL
(page 14)



Angénieux
10×12 C
12-120 mm f/2
222.120 ANGOM
(page 12)



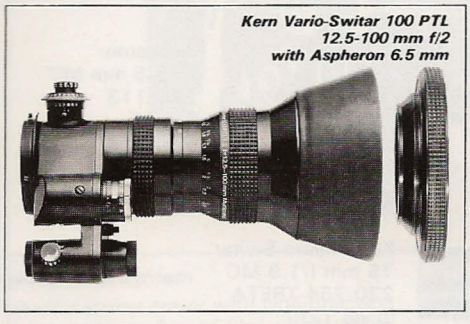
Varta-Deac
10×1000 DKZ
battery
261.110 BATEB
(page 14)

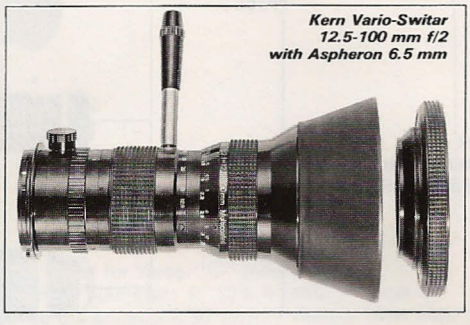


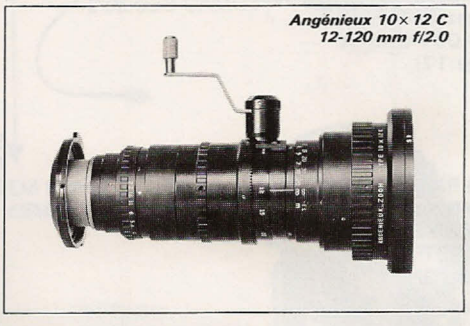
Battery charger
261.330 CHAAV
(page 14)

For other Angenieux lenses such as models 6×9.5, 15×10 and 20×12 and extremely long tele-lenses, special lenses, night lenses with electronic image amplifier, video viewers, etc., please contact your local Bolex Distributor or BOLEX INTERNATIONAL S.A., Yverdon, Switzerland.

Zoom and fixed focal length lenses


Kern Vario-Switar 100 PTL 12.5-100 mm f/2 with Aspheron 6.5 mm


Kern Vario-Switar 12.5-100 mm f/2 with Aspheron 6.5 mm


Angénieux 10× 12 C 12-120 mm f/2.0

Kern Vario-Switar 100 PTL 12.5-100 mm f/2 MC with Aspheron 6.5 mm

With an 8 × zoom, a useful wide angle setting of 12.5 mm and the Aspheron 6.5 mm optical attachment, this is a multi-purpose lens.
It has a built-in TTL exposure meter and power zoom with variable speeds.
The lens has 19 elements and is multicoated (MC), so that an overall increase in contrast has been achieved, resulting in better shots particularly when filming against the light.

The most important technical features:
- Horizontal field angle from 41° (752‰) to 5½° (96‰). With the Aspheron 72° (1450‰).
- Geometric apertures from f/2 to f/16, with mark for photometric apertures (T-stop).
- Focusing from 1.2 m to infinity. A special control makes it possible to focus sharply at very short distances, particularly necessary when using the Aspheron wide-angle attachment.
- The Aspheron was designed specially for use with the Vario-Switar 100 PTL and, even with the diaphragm fully open, has a focusing range from 1 m to infinity and is practically distortion free.
- Two-blade automatic diaphragm — can also be set manually — with CdS photo-electric cell in the lens behind the zoom variator and centre-weighted measuring field over 2/3rds of the image area.

Vario-Switar 100 PTL 12.5-100 mm f/2 MC with Aspheron 6.5 mm and bayonet mount
Code: 221.130 VASPO

Same lens with "C" mount: price and delivery time on request.

Kern Vario-Switar 12.5-100 mm f/2 MC with Aspheron 6.5 mm

This lens optically identical to the Vario-Switar 100 PTL described above. The only differences are the following:
- Geometric apertures f/2 to f/22
- No automatic diaphragm
- No power zoom

Its use is therefore particularly recommended for the BOLEX H16 EL, because this camera is equipped with its own built-in TTL exposure meter.

Vario-Switar 12.5-100 mm f/2 MC with Aspheron 6.5 mm

"C" mount	Code: 221.123 NOCAF
Bayonet mount	Code: 221.125 NOUFA

Angénieux 10× 12 C 12-120 mm f/2.0

Horizontal field angle (projector aperture): 44° = 804 ‰ to 4½° = 80 ‰

This lens is outstanding for its very big focal length ratio (10 times), making it possible, by means of a crank handle, to change smoothly from a focal length of 12 to 120 mm. Focusing range from ∞ to 1.50 m; with close-up attachments from 1.55 and 0.65 m. Geometric and photometric apertures indicated on the diaphragm ring.

Angénieux 10× 12 C	Codes:
• with "C" mount	222.120 ANGOM
• with "C" mount + bayonet adapter	222.121 ANOBA

Close-up attachment No 1 for filming between 1.55 and 0.85 m — 222.903 ANGEB

Close-up attachment No 2 for filming between 0.87 and 0.65 m — 222.905 ANGAN

Close-up attachment for the two Vario Switar lenses
for filming between 1.10 m and 0.70 m — 221.901 BONET

Filtres ASA series 9 for the two Vario-Switar and Angénieux 10 × 12 C lenses

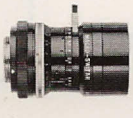
yellow	267.001 VAUNE
neutral density	267.003 VAGRI
UV	267.005 VAPUV
conversion 85	267.007 VAVER
conversion 85 B	267.009 VACON

Kern fixed focal length lenses

Kern lenses incorporate an exclusive automatic depth-of-field scale (Visifocus – orange dots).

Wide-angle SWITAR 10 mm f/1.6 RX MC

Standard MACRO-SWITAR 26 mm f/1.1 RX MC



Telephoto MACRO-SWITAR 75 mm f/1.9 MC

Horizontal field angle	52° = 965‰	21° = 371‰	7° = 129‰
Relative magnification	0.4 ×	1 ×	3 ×
Focusing range	8"- ∞	(7½") 20"- ∞	(2'6") 5'- ∞
Diaphragm preselection device	★	★	★
Dual-range extension for macrofilming		★	★
Filters series	5.5	5.5	6
• with "C" mount	220.103 PIASE *220.101* COASE*	220.263 PIENO *220.261* COTNO*	220.754 TRETA
• with "C" mount + bayonet adapter	220.105 PIABA *220.104* COABA*	220.265 PIEBE *220.264* COTBE*	220.755 TRELO

* Scale in metres on the distance ring.

"C" mount
Lens seat/film plane distance: 17.52 mm. Thread: 1" (25.4 mm).

Bayonet mount
Bearing on three small tongues. Centering diameter: 60 mm. Distance between bearing plane of tongues and lens focal plane: 23.22 mm

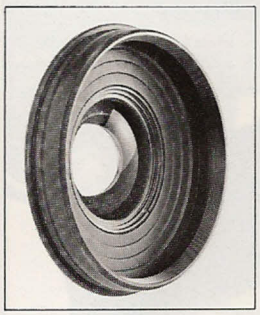
"C" mount→bayonet mount adapter
"C" mount lenses can be used on the bayonet lens mount by means of a suitable adapter.
Code: 265.662 ADSIM

Aspheron 5.5 mm super wide-angle attachment for Switar 10 mm

This aspherical optical accessory, specially designed for use with the Switar 10 mm f/1.6 wide-angle lens with presetting of the diaphragm makes it possible to practically triple the field of view without detracting from the quality of the picture.

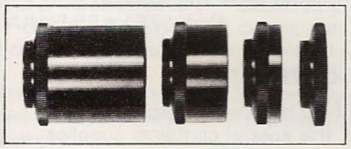
- Resultant focal length: 5.5 mm
- Field of view: 95°
- Horizontal field angle: 84° (projector aperture)
- Distortion: negligible
- Correction of the diaphragm: nil
- Concave surface: spherical
- Convex surface: aspherical
- Anti-reflection treatment: multicoated
- Retaining ring for filter Series 9
- Front thread: M 85 × 0.75

Code: 220.113 CESAF



Extension tubes

For use with any H16 Reflex camera fitted with a turret or bayonet mount. Extension tubes are employed to achieve extreme magnification of minute subjects such as insects, filmed at very close range. The viewfinding system of H16 Reflex cameras ensures maximum accuracy in framing and focusing of the subject. These tubes are supplied with a calculator table for fixed focal length lenses from 25 to 150 mm. Code: 266.440 TUBEX

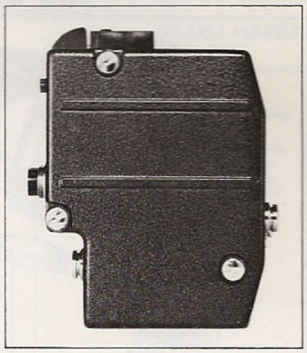


For other Angenieux lenses such as models 6 × 9.5, 15 × 10 and 20 × 12 and extremely long tele-lenses, special lenses, night lenses with electronic image amplifier, video viewers, etc., please contact your local Bolex Distributor or BOLEX INTERNATIONAL S.A., Yverdon, Switzerland.

EM motor

(for all H16 cameras equipped with the 1:1 spindle)

The EM motor has been designed for filming *without synchronous sound recording*. It drives the film at speeds of 12 to 25 f.p.s. It is powered by the 261.660 12 V/1.2 Ah power pack. The speed is set on the camera; it is therefore the camera's mechanical regulator



that determines the filming speed; an electronic current regulator prevents any overloading of the motor or camera.

Technical data

- Powered by 12 V/1.2 Ah battery (or any other DC source possessing the same characteristics).
- Socket for connecting to the winding mechanism of the 400 ft magazine.
- Remote control socket.
- Release by push-button or 265.005 remote control cable or the 263.110 hand grip.
- Reverse motion (only with 100 ft spools).
- The shutter is not automatically closed when the mechanism stops.

EM motor with complete standard equipment Codes: 260.550 COPEN

The complete standard equipment comprises:

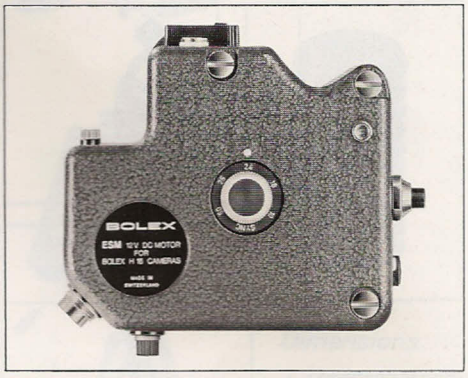
EM motor alone	260.001 MOTEM
12 V/1.2 Ah power pack carried slung over the shoulder; capacity: 1200 ft of film	261.660 ELPOW
Standard charger	261.880 ECHAR
"Electric" pistol hand grip	263.110 ELPOI

ESM self-regulating multi-speed motor

The ESM motor which fits onto all H16 cameras equipped with the 1:1 spindle is designed for filming *with synchronous sound recording*. This electronically regulated auxiliary motor drives the film at the perfectly stabilized speeds of 10, 18, 24, 25 and 50 f.p.s. It is used with the same crystal/sync pulse accessory as the H16 EBM Electric and EL cameras. It is provided with an automatic clapper device which fogs a few frames at the beginning of each take.

Technical data

- Powered by 12 V Varta-Deac 10 × 10000 DKZ 1 Ah battery housed in the 261.001 power grip or in the 261.220 container with 265.010 power and remote control cable, or by the 261.660 12 V/1.2 Ah power pack.
- Nominal voltage: 12 V.
- Built-in release.
- External power socket.
- Remote control socket.
- Crystal/sync pulse socket.
- Automatic clapper.



- T2A fuse.
- The shutter is not automatically, closed when the mechanism stops.

ESM motor with complete standard equipment Codes: 260.660 ESMOT

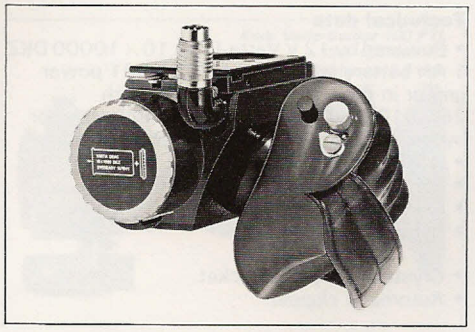
The complete standard equipment comprises:

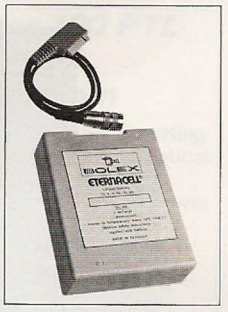
ESM motor alone	260.111 MONUD
Power grip	261.001 PONAL
12 V Varta-Deac 10 × 1000 DKZ battery	261.110 BATEB
Battery charger with cables	261.330 CHAAV

Power and remote control cable for connection to the 261.220 battery container 265.010 CASOC

Variante

ESM motor alone	260.111 MONUD
Power-pack	261.660 ELPOW
Battery charger	261.880 ECHAR
Remote control cable	265.005 ELTEL
"Electric" pistol hand grip	263. 110 ELPOI





Power hand grip

(for H16 EBM Electric camera and H16 camera equipped with the ESM motor)

This grip, fitted with a rapid attachment device, has a compartment for the Varta-Deac 10 × 1000 DKZ battery, as well as a start button and a button for the diaphragm preselection of the Vario-Switar 100 POE. Designed to fit the contours of the hand, the grip can be swivelled to the most convenient position, and the length of its strap adjusted, thus ensuring excellent control over the camera.

Code: 261.001 PONAL

Varta-Deac battery

The Varta-Deac NC battery, type 10 × 1000 DKZ, is used to power the ESM motor or the H16 EBM Electric camera. Capacity: 1 Ah. Nominal voltage: 12 V. It is housed in its own compartment in the 161.001 power grip, or in the 261.220 battery container.

Code: 261.110 BATEB

Lithium Battery 14V/6Ah/75Wh

An ideal power source for expeditions. Capacity min. 30 400 ft magazines. Life about 10 years without noticeable loss of capacity. Working temperatures between −50° and +70°. At −40° still supplies 60 % of its nominal capacity.

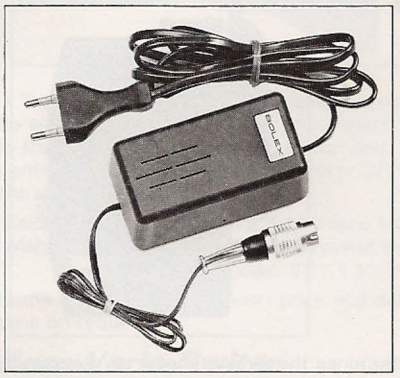
Not rechargeable. Code: 261.800 BALIT

Battery chargers

For charging the Varta-Deac 1000 DKZ battery and the 12 V/0.8 Ah and 1.2 Ah power packs. Charging time 12-14 hours on 110 or 220 V/ 50-60 cycles. Electronically protected against overcharging.

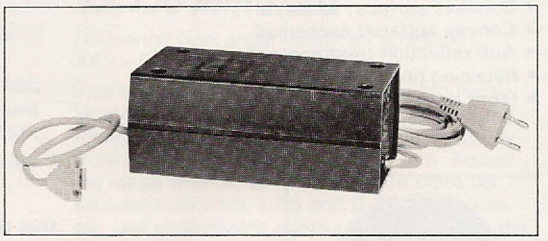
Charger for Varta-Deac battery
Code: 261.330 CHAAV

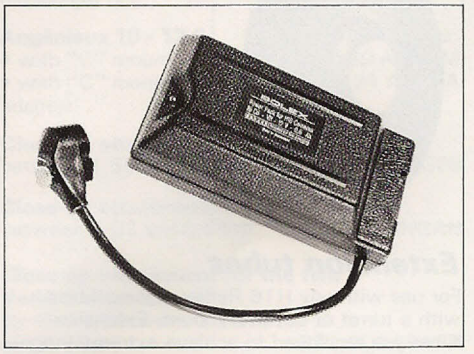
Charger for 0.8 Ah and 1.2 Ah power packs
Code: 261.880 ECHAR



Fast charger

This enables the 261.455 12 V/0.8 Ah power pack to be charged up to about 90% of its capacity in less than 50 minutes and the 261.550 12 V/1.2 Ah power pack in about 1 hour 20 minutes, both at + 20° C. Equipped with a complex electronic regulating system which takes the voltage and internal temperature of the battery into consideration, it avoids any risk of overcharging. It automatically switches to normal charging once rapid charging is completed. It is adjustable for 110 or 220 V/ 50-60 cycles. Code: 261.990 ELRAP





12 V/1.2 Ah power pack

For powering H16 EL and EBM Electric cameras or ESM and EM motors. The 12 V/1.2 Ah power pack carried slung over the shoulder or in a pocket provides sufficient power for about 1200 ft of film at + 20° C. It is equipped with the temperature and thermostat probes needed for rapid recharging, which takes about 1 hour 20 minutes.

It must be connected up by means of one of the cables below.

Power cable for H16 EL camera or EM and ESM motors	Codes: 265.020 ELCAB
Power and remote control cable for connecting to the 263.220 base of the H16 EBM Electric camera	265.015 CATEL
12 V/1.2 Ah power pack alone	261.550 POSAN
12 V/1.2 Ah power pack with 265.020 power cable the	261.660 ELPOW
12 V/1.2 Ah power pack with 265.015 power and remote the control cable	261.770 EBPOP

12 V/0.8 Ah power pack

For powering the H16 EL camera. The 12 V/ 0.8 Ah power pack, which fits onto the camera lid, provides sufficient power for about 600 ft of film at + 20° C. It is equipped with the temperature and thermostat probes needed for rapid recharging, which takes about 50 minutes. Built-in cable for connecting to the camera Code: 261.455 ELHUI

Battery container

Designed to hold the Varta-Deac 10 × 1000 DKZ battery, this special container supplies power directly to the ESM motor or the H16 EBM Electric camera equipped with the 263.220 base by means of the 265.010 power and remote control cable. It can be attached to the belt or, for example, to the tripod.

Code: 261.220 COTAC

Power and remote control cable for connecting the 261.220 battery container to the ESM motor or H16 EBM Electric camera with the 263.220 base Code: 265.010 CASOC

Synchronous sound recording

Hand grips

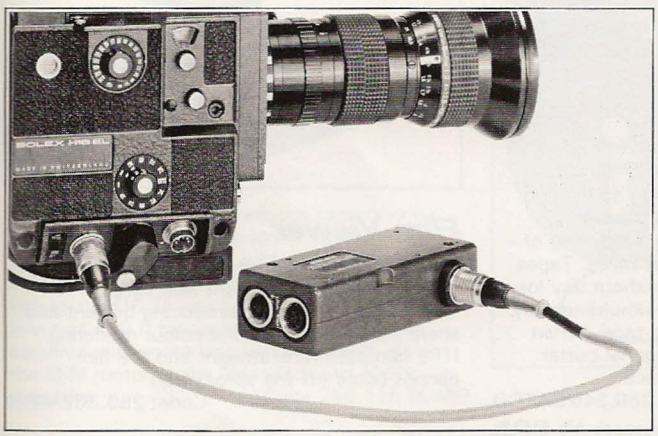
Tripods, etc.

Crystal/sync pulse (PQM) accessory

(for H16 EBM and H16 EL cameras as well as for H16 RX-5 and H16 SBM cameras equipped with the ESM motor)

This basic equipment gives the following possibilities:

- Synchronisation of the camera mechanism on the frequency of a crystal, making it possible to guarantee the precision of the filming speeds of 24 and 25 f.p.s. to within a margin of error of less than 0.002%, from −20 to +50° C (less than ¼ of a frame out in 400 ft of film).
- Synchronisation of the camera mechanism on an external signal working in the neighbourhood of the filming speeds of 24 and 25 f.p.s., in a zone of ±10%.



- Transmission of a sync pulse proportional to the camera speed (60 cycles at 24 f.p.s. or 50 cycles at 25 f.p.s.; 50 cycles at 24 f.p.s. on the special model).
- Transmission of a 12 V DC clapper signal (3 different standards of automatic clapper).

Two versions are available:

- unit for setting to 24 f.p.s. 60 cycles or 25 f.p.s. 50 cycles, with 1 m connecting cable and protective cover. Code: 262.221 PICAR
- unit for 24 f.p.s. 50 cycles only, with 1 m connecting cable and protective cover. Code: 262.331 PIJAP

Dimensions: 135 × 57 × 35 mm. Weight: 290 g.

Set of accessories for sync pulse equipment comprising:

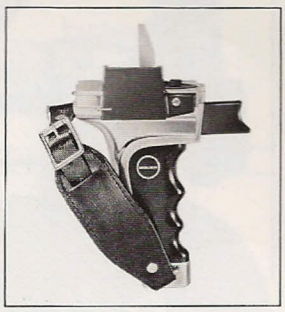
Cable for connecting to the tape recorder (7.5 m) without tape-recorder jack;
1 clapper lamp mount and 1 clapper lamp

- for H16 EL and H16 EBM cameras Code: 265.065 PIKEB
- for H16 SBM and H16 RX-5 cameras (from No. 350.001) with ESM motor (with special connecting cable) Code: 265.070 PIRES
- for H16 RX-5 camera (from 230.492 up to No. 262.000) with ESM motor (with special connecting cable) Code: 265.075 PIRIX

"Mechanical" pistol hand grip

For flat-based H16 cameras not equipped with an electric motor. It is particularly suitable for hand-held filming with a camera fitted with a Vario-Switar lens. It is provided with a rapid attachment device. It can be supplied with a 265.030 cable for connecting to the Vario-Switar 100 POE 16-100 mm f/1.9 for the pre-selection of the diaphragme.

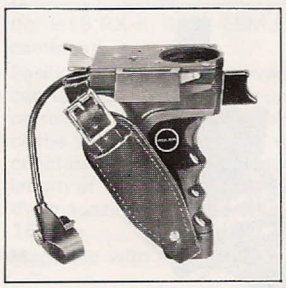
Code: 263.001 HAFRA



Power grip

Code: 261.001 PONAL

See page 14



"Electric" pistol hand grip

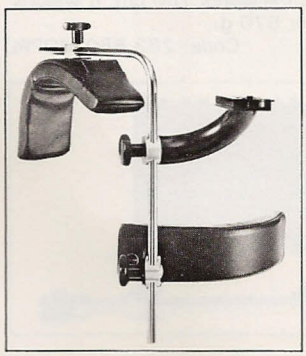
For flat-based H16 cameras equipped with the EM or ESM electric motor powered by the 261.660 power-pack or for the EL camera. Equipped with a built-in micro-switch and a rapid attachment device, it is supplied with a cable for plugging into the remote control socket of the motor or the camera.

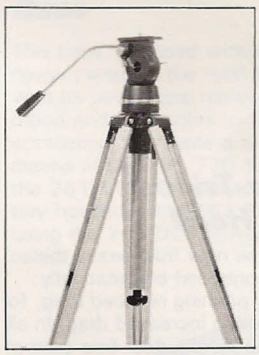
It can be supplied with a 265.030 cable for connecting up to the Vario-Switar 100 POE 16-100 mm f/1.9 for the preselection of the diaphragm. Code: 263.110 ELPOI

Shoulder Brace

A practical, rugged and light-weight shoulder brace with BOLEX rapid attachment device. The camera mounting plate can be adjusted both vertically and horizontally.

Code: 263.770 HARPO





Dimensions:

- collapsed length 100 cm
- extended, column on the base 153 cm
- extended, column fully extended 185 cm

Tripod with panoramic head with friction bearings on Teflon

A light, sturdy tripod, with adjustable column and built-in swivel joint. Equipped with a panoramic head especially designed for movie making, with rapid attachment device. The braking of the horizontal and vertical movements being effected on Teflon, this ensures extremely smooth and regular friction comparable to hydraulic-type friction devices.

- basic friction of the horizontal and vertical movements on Teflon, adjustable in the works;
- additional gradual braking, also ensuring the complete blocking of the two movements;
- spirit level, for setting horizontal;
- handle turning in all directions.

Tripod:

- with rapid removable "Bolex type" attachment Codes: 263.550 PIBOL
- with standard ¼" and ⅜" screw attachment 263.551 PIUNI

Protective cover in canvas and plastic 264.990 TRIUS

Cutting and editing

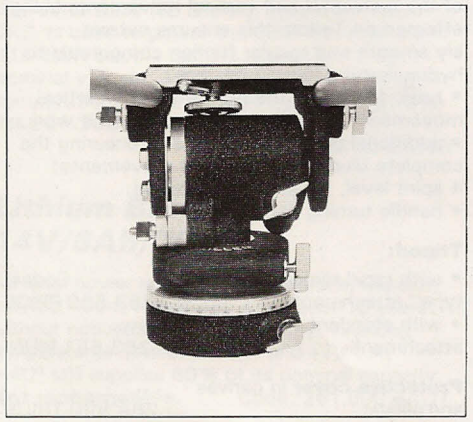
Monopod

A highly practical accessory that can be used with all H16 cameras. Very often, it dispenses with the need for a tripod, Its collapsed length is only 53 cm; fully extended it measures 160 cm. It weighs under 670 g.

Code: 263.660 MOPRO

Miller Tripod Fluid Head

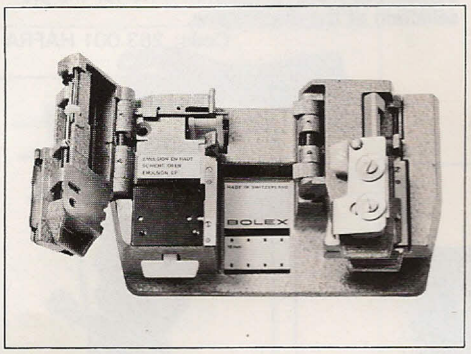
With these new fluid heads the drag is controlled automatically: for quick panning reduced drag, for slow panning increased drag. In all cases complete judder-free start of the movement, enabling smooth and uniform panning, even with long tele-lenses.
Absolutely safe tilting up to 90°.
Designed for medium weight 16 mm and video cameras.
Model Senior F 102
Code: 263.222 MITWO
Model Senior F 103
with accessory slip pan unit
Code 263.223 MITRE



Cement Splicer

For use with 16 mm film perforated on one or both edges. Makes splices that run smoothly through the pojection film gate and cause no audible variations with sound films. The mechanism is extremely reliable and requires very little maintenance.

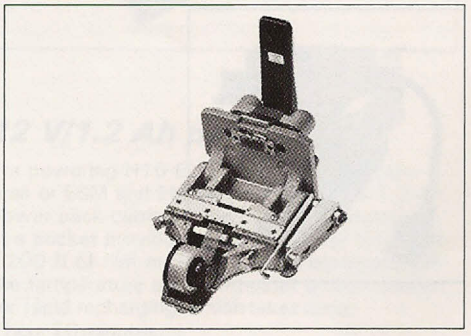
Code: 269.440 COLSE



Butt-joint Splicer

Professional type for 16 mm film and sound tape editing. Ideal for work on the editing table, for provisional editing and repairing of torn prints and broken sprocket holes. Tapes on one side only in seconds, without any loss of image or sound, perforates simultaneously with the cutting of the splicing tape. When used with sound stock, its diagonal cutter does not damage the sound track.

Code: 269.345 CATCO



Accessory for CATCO: Adapter for use of a second tape for splicing magnetic tape, supplied with a set of 10 rolls of 12 mm white adhesive tape. Code: 269.353 SUBAN
Set of 10 rolls of 12 mm white adhesive tape (spare) Code: 269.358 BANAD

Splicing tape

Packet of 10 rolls (polypropylene)

Code: 269.355 ROSCO

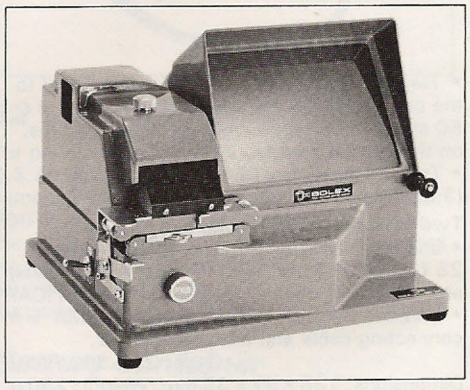
Wrap-Around Splicer

Professional, precise and sturdy design. The joint is taped on both sides, but the sound track remains undisturbed. Ideal for demonstration copies, film rentals, film archives. During projection, the splice is effectively invisible.
The modern splicing tapes (polypropylene) are extremely thin and crystal clear. Films spliced by this means can be stored without problem for years. Code: 269.350 SINCO

Film Viewer

Professional 16 mm viewer with 12 V/100 W halogen lamp and efficient fan. Large 140 × 105 mm screen, producing brilliant and sharp images with faithful colour rendering. (The film path runs straight and the film cannot come off the sprockets.)

Code: 269.365 VISEI



Film Winders for Viewers

Accept reels up to 600 m (2000ft) capacity. For mounting on a base board or for fastening to a table by means of clamps (optional), according to the user's requirements, in conjunction with viewer and splicer, 2 gear transmission ratio from handle to reel spindle 1:1 or 1:3. Supplied in pairs

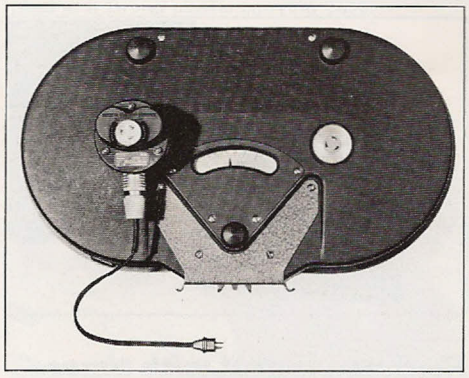
Code: 269.363 ENBRA

Miscellaneous

12 Volt Charger for Bolex Ni-Cd Power Packs

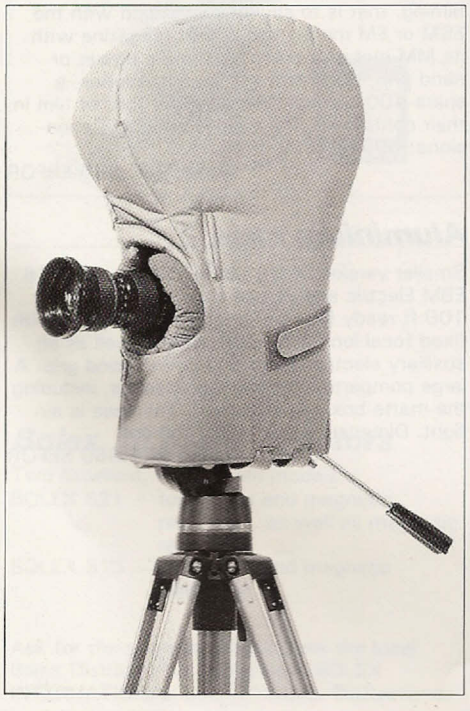
Allows to recharge 12V Ni-Cd accumulators from DC supplies 10 to 15V (e.g. car battery 12 V). Charging current is automatically adapted to the type of power pack used. Charging time 14 hours. Working at temperatures from 0 to +50° C.

For power packs
0.8 Ah and 1.2 Ah Code: 261.900 CHAUT
For power pack
VARTA DEAC Code: 261.901 CHEMB



Blimp

This sound-proof cover reduces camera noise considerably. It is composed of several layers of special material covered with plastic and has a «Velcro» fastening.
Fits on all H16 EL and EBM cameras with zoom lens and 400 ft magazine, also spring-driven cameras with zoom lens and fitted with either the ESM motor or the EM motor and 400 ft magazine. Code 266.115 BLIMO



400 ft magazine

(for H16 RX-5, SBM, EBM Electric, and EL cameras)
Easily mounted and removed, this magazine can take 200 ft spools or up to 400 ft of film on rolls. It is used in conjunction with the MM or the WM winding motor, which ensures constant film tension. A counter indicates the length of film remaining unexposed. Weight of the magazine equipped with the MM motor: 1500 g.

Magazine with two centering hubs
Code: 266.001 CASFA

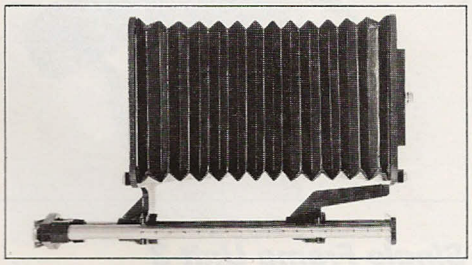
12 V take-up motor, model MM for filming speeds of 10 to 32 f.p.s. including 2 guide rollers for the camera and connection cable.
Code: 266.012 CAMEB

12 V take-up motor, model WM. 4-Position switch to adjust take-up speed to filming speed, from single frame to 50 f.p.s. Can be used with H16 EL cameras with serial numbers of 311.001 and above, with H16 RX-5, SB and SBM cameras equipped with ESM motors with serial numbers of 5001 and above or EM motors from the first series, supplied with integral connection cable and 2 guide rollers for the camera. Code: 266.023 CAMOT

2'' core for 400 ft magazine (spare)
265.663 BOBBY
Cover for 400 ft magazine 266.110 HOUMO

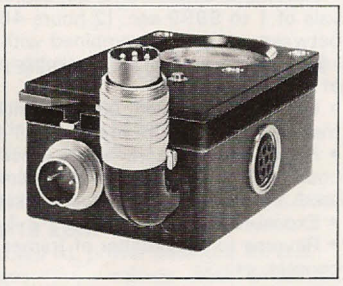
Matte box

This accessory greatly simplifies the achieving of trick effects, such as entering a room through a keyhole, making the same person appear several times on the same frame, on-the-spot titling, etc. Supplied with a set of masks and acetate sheets.
Code: 266.220 COZOM



Base

This base, provided with a rapid attachment device, enables the H16 EBM Electric camera, with its power grip removed, to be fixed to a tripod and connected to the crystal/sync pulse accessory. The camera is then powered by means of the 261.770 1.2 Ah power pack or the 261.110 Varta-Deac 10 × 1000 DKZ battery housed in the 261.220 battery container, using the 265.010 power and remote control cable.



Base
Code:
263.220
EBSOC

Synchro-flash relay

A necessary accessory for the H16 EL, when using this camera in conjunction with electronic flash equipment incorporating a control circuit of higher amperage than 10 mA/28 V.
266.990 BOISY

Cable release

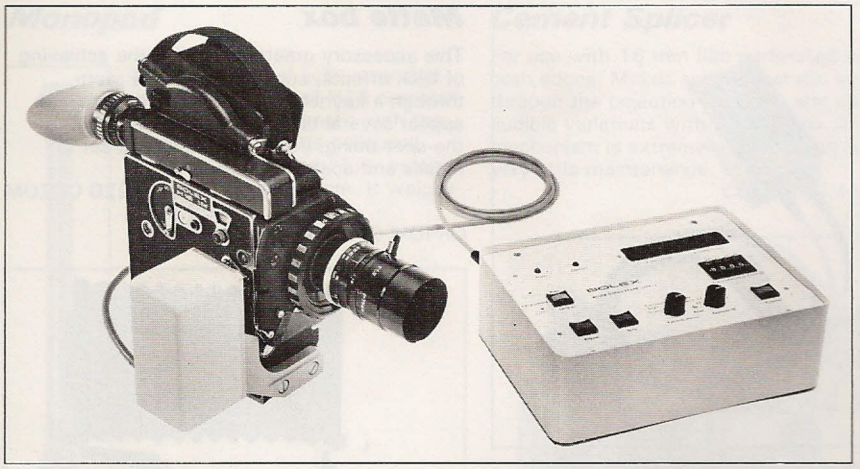
For side release; fitting on to the side release knob of the camera by means of an adapter.
Cable with adapter, length 2' 4'' (70 cm).
Code: 265.035 DENOR
Cable without adapter 265.034 DESAN
Adapter without cable Code: 265.038 CLOVI

RX-Fader

For fade-ins, fade-outs and lap dissolves with H16 spring-drive cameras. Smoothly and automatically opens and closes the variable shutter over 40 frames. Code: 266.330 FADOM

Animation and timer

Carrying cases



Single Frame Unit-3

This single frame unit with timer can be used with all H16 RX-5, SB, SBM and EBM cameras with the 1:1 drive shaft. It is a universal unit which operates equally well on AC mains supply 105 to 120 V or 210 to 240 V, 50 or 60 cycles, and on 15 to 30 V batteries. It is used mainly for animation work and scientific films in the fields of micro- and macro-cinematography, medicine, research and industry.

Its most important features are:

- Automatic single-frame exposures at intervals of 1 to 9999 sec. (2 hours 46 minutes) between each take, combined with automatic switching on and off of spotlights or triggering of flash units.
- Continuous running, up to the number of frames set on the counter, from 1 to 9999.
- Repetition of the frame sequences set on the counter. Every time the mechanism is operated, the same frame sequence is repeated.
- Exposure times: 1/10-1/2-1-2-4-8 sec.
- Reverse to the number of frames set on the counter, etc.

Single frame unit-3 for 220 V
Code: 266.664 FRAIM

Single frame unit-3 for 110 V
Code: 266.665 FRAUS

Remote control with timer for Bolex H16 EL camera

This Bolex accessory which plugs into the remote control socket on the H16 EL camera, makes possible:

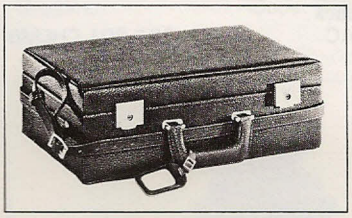
- the manual remote control of the camera mechanism in normal or single frame operation;
- sequences programmed for between 1 and 9999 frames, at any filming speed; the sequence can be repeated as often as required, by giving a single impulse;
- single frame operation or operation in bursts of 1 to 9 frames (minimum interval between two frames or series of frames: 0.5 seconds) with exposure time determined by the position of the camera filming speed selector. This makes it possible to change instantly from normal to single frame operation and vice versa, without having to stop filming, for the purpose of inserting, for example, a slow motion effect in the middle of a sequence filmed at normal speed;
- automatic single frame filming with interval adjustable from 0.5 to 999.5 seconds.

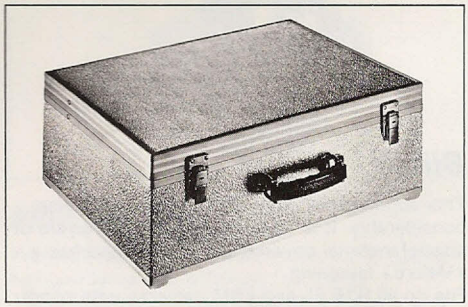
Dimensions: length 193 mm, width 136 mm, height 60 mm.

Supplied with cable for connection to the camera (1.60 m) and a protective zip case.
Code: 266.880 ELTIM

Black grained skai case

Designed for all H16 100 ft cameras, it is particularly well suited to the H16 EL camera fitted with a zoom lens, like the Vario-Switar 12.5-100 mm f/2 multicoated.
Space for a hand grip as well as films and accessories.
Dimensions: 42 × 27.5 × 14.5 cm.
Code: 264.005 ELBID





Aluminium case

For the H16 EBM Electric and EL cameras, as well as any H16 400 ft models ready for filming, that is to say fully equipped with the ESM or EM motor, the 400 ft magazine with its MM motor, a zoom lens and a power or hand grip. Compartment for accessories, a spare 400 ft magazine, and four rolls of film in their containers. The case is airtight. Dimensions: 60 × 49 × 22 cm.
Code: 264.550 EBFOR

Aluminium case

Smaller version of the above. Carries the H16 EBM Electric and EL cameras or any H16 100 ft ready for use i.e. camera equipped with fixed focal length or zoom lens as well as an auxiliary electric motor and power hand grip. A large compartment holds accessories, including the matte box and monopod. The case is airtight. Dimensions: 54 × 39 × 20 cm.
Code: 264.660 SEFOR

Special applications

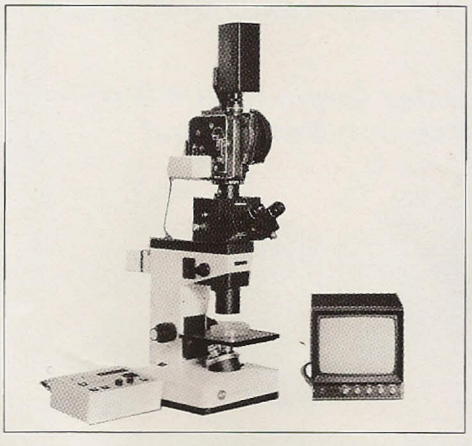
Power relay for use with the BOLEX H16 EL Timer

A relay with 2 switching circuits for the synchronous switching on and off of lighting installations or electrical instruments. The first circuit comes into operation during exposure of the film, the second circuit during the intervals. Maximum load per switching circuit 6 A/250 V.

Video viewfinder unit

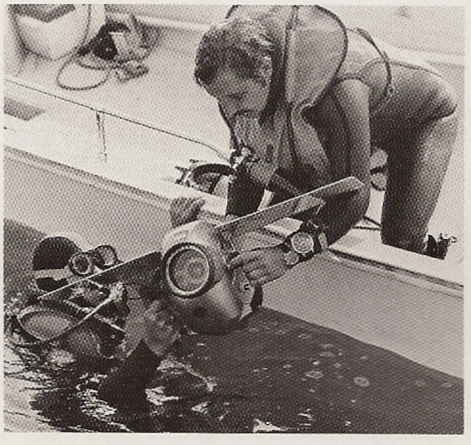
A video viewfinder unit can be of particular use on a BOLEX H16 camera in the following instances:

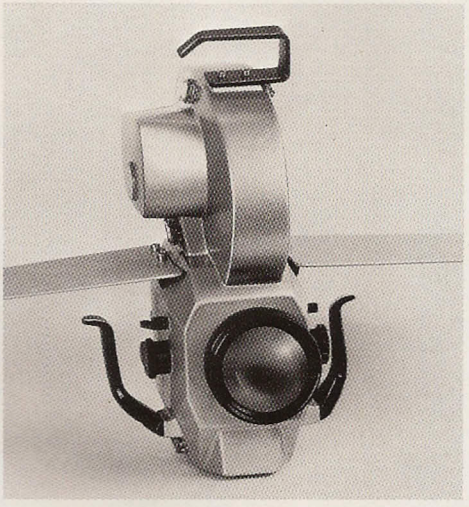
- Cameras in an inaccessible situation. For example, in another room or mounted in a position where the cameraman does not have easy access to the viewfinder.
- Micro-cinematography. The object being filmed can be conveniently observed on the monitor screen.
- Animation work. The video viewfinder greatly facilitates this operation. A transparent graph can be placed on the screen to help analyse the subject's movements.
- Courses and demonstrations. Several people can watch the monitor screen at the same time.



Underwater housing 100 ft

This Bolex underwater housing has been specially designed for H16 EL and EBM Electric cameras, equipped with the Switar 10 mm f/1.6 or Macro-Switar 26 mm f/1.1 lens, with or without aspheron.
The precision of focusing and framing, which can be carried out through the camera's own reflex viewfinder thanks to a viewfinder adapter, makes even macro shots possible.
The housing, which consists of two parts, is made of light metal alloy; very sturdily built, it is capable of withstanding water pressures down to a depth of 320 ft. Locking cams (patented system) ensure rapid, reliable locking of the housing. Guaranteed by O-rings, the seal is perfect. All external and internal metal parts are permanently protected against corrosion. It is equipped with two stabilizer fins. It is supplied in a strong plastic carrying case.





Model for H16 EBM Electric
with container for the Varta-Deac battery, and connecting cable
Code: 266.777 EBMOD

Model for H16 EL with lever for operating the camera's light meter cell, and connecting cable
Code: 266.774 ELDOM

Model for H16 SBM and H16 RX-5
Code: 266.782 REBDO

Underwater housing 400 ft

For H16 EL and EBM with 400 ft magazine. Filming speeds can be changed under water. Max. diving depth of 180 ft. All other specifications like unterwater housing 100 ft.

Model for H16 EL Code: 266.765 CASUB

Model for H16 EBM
with new camera lid, power pack 0.8 Ah and battery charger Code: 266.767 EBDOC

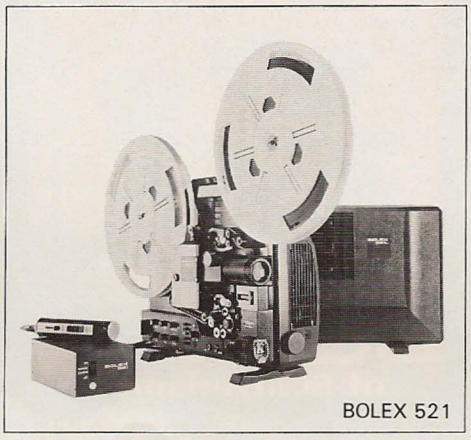
Bolex 16 mm Projectors

Two excellent, well proven models:

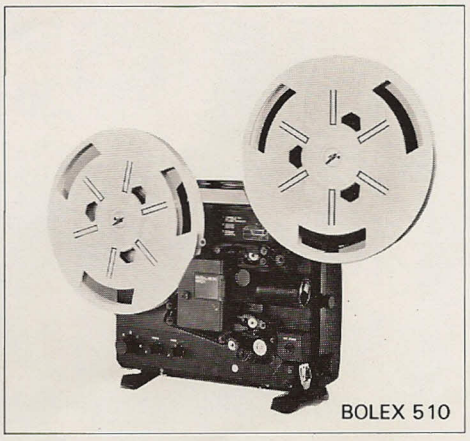
BOLEX 521 – for optical and magnetic projection, as well as magnetic recording.

BOLEX 510 – for optical and magnetic projection.

Ask for the projector leaflet from the local Bolex Distributor or direct from BOLEX INTERNATIONAL S.A., Yverdon, Switzerland.



BOLEX 521



BOLEX 510